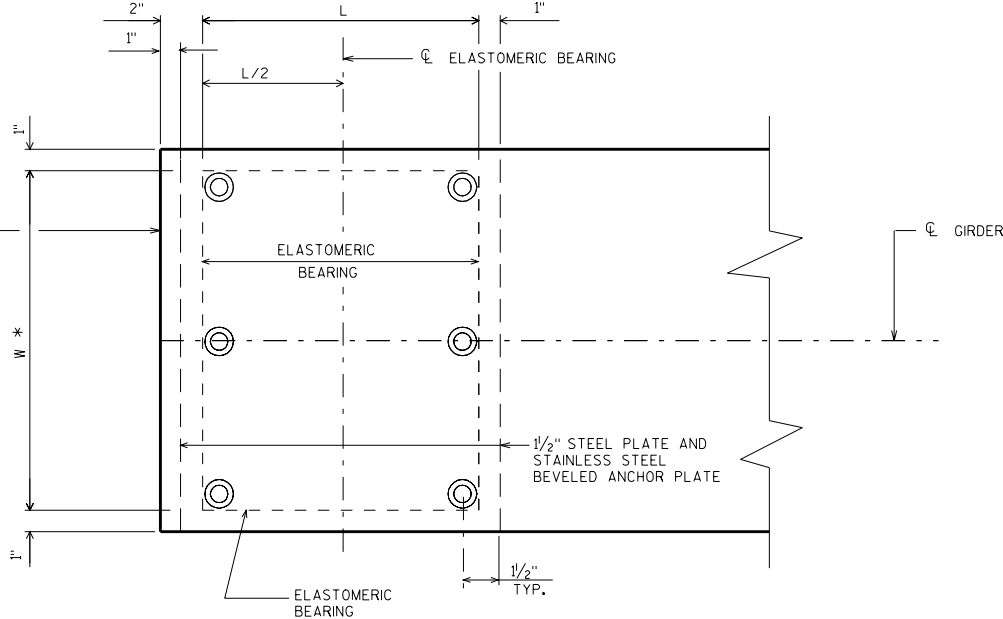
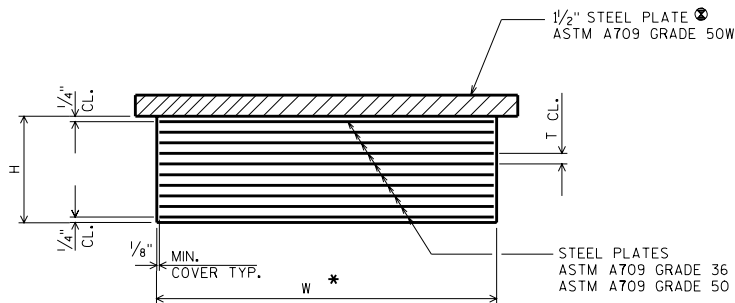


END VIEW



PLAN VIEW



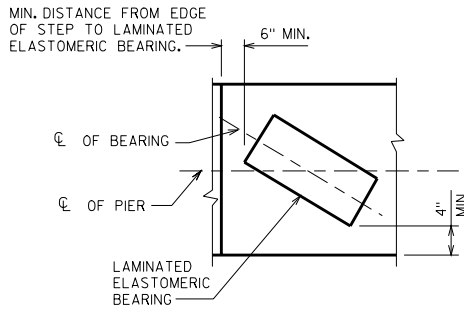
SECTION THRU ELASTOMERIC BEARING

* W = BOTTOM FLANGE WIDTH OF PRESTRESSED GIRDERS MINUS 2"

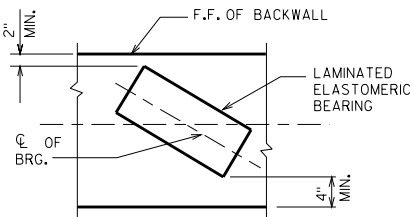
⊗ CHECK AASHTO 14.7.2 REQUIREMENTS TO SEE IF THIS PLATE SHOULD BE TAPERED.

EXPANSION BEARINGS FOR PRESTRESSED CONCRETE GIRDERS

Δ_H (INCHES)	EXP. LENGTH (FEET) ☆	TOTAL BEARING HEIGHT H (INCHES)	TOTAL ELASTOMER THICKNESS (INCHES)	LONGITUDINAL LENGTH OF BEARING L (MIN.) ▲	STEEL PLATE THICKNESS (INCHES) EACH	ELASTOMER THICKNESS T (INCHES)	NO. OF PLATES REQ'D.
1"	130	2 1/2"	2"	8"	1/8"	1/2"	4
1 1/4"	165	3 1/8"	2 1/2"	10"	1/8"	1/2"	5
1 1/2"	195	3 3/4"	3"	1'-0"	1/8"	1/2"	6
1 3/4"	230	4 3/8"	3 1/2"	1'-2"	1/8"	1/2"	7
2"	260	5"	4"	1'-3"	1/8"	1/2"	8
2 1/4"	295	5 5/8"	4 1/2"	1'-5"	1/8"	1/2"	9



AT SKEWED PIER



AT SKEWED ABUTMENTS

CLEARANCE DIAGRAM

NOTES

ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED *".

ON BEARING REPLACEMENTS, COMPRESSION LOAD AND ADHESION TESTS WILL BE WAIVED WHERE BEARINGS ARE DETAILED TO MEET HEIGHT REQUIREMENTS.

ALL STRUCTURAL STEEL PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

☆ THE "EXPANSION LENGTH" IN THE TABLE WAS CALCULATED BASED ON THE TOTAL ELASTOMER THICKNESS IN COLUMN (4). IT IS FOUND BY APPLYING AASHTO (14.6.6.3.4), USING A TEMPERATURE RANGE OF 55° F, A COEFFICIENT OF THERMAL EXPANSION OF 0.000006 FT./FT./°F, AND A CREEP/SHRINKAGE COEFFICIENT OF 0.0003 FT./FT. THE DESIGNER IS TO SELECT PRELIMINARY BEARING DATA FROM THE TABLE BASED ON "EXPANSION LENGTH" AND THEN COMPLETE THE DESIGN BY SATISFYING ALL CRITERIA IN AASHTO SECTION 14 (DIVISION I). (SEE SECTION 27.7 IN "BRIDGE MANUAL" FOR DESIGN EXAMPLE.)

▲ L (MIN.) IS BASED ON STABILITY REQUIREMENTS (AASHTO 14.6.6.3.6).

Δ_H = TOTAL HORIZONTAL MOVEMENT OF SUPERSTRUCTURE MEASURED FROM STATE AT WHICH BEARING IS UNDEFORMED.

ELASTOMERIC BEARINGS FOR PRESTRESSED CONCRETE GIRDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: _____ DATE: 2-06